

CLAIMS

1. A process for the cultivation of cells producing IL-18BP, comprising the step of growing the cells in a cell culture medium that is free of components derived from animal serum, wherein the cell culture medium comprises:

Asparagine at a concentration ranging from about 800 to about 900 mg/L;
Natrium Chloride at a concentration ranging from about 3000 to about 4500 mg/L;

Selenite at a concentration ranging from about 0.005 to about 0.015 mg/L;

Wheat hydrolysate at a concentration ranging from about 5000 to about 15000 mg/L; and

Insulin at a concentration ranging from about 2.5 to about 6 mg/L.

2. A process for the production of IL-18BP, comprising the step of cultivating a cell expressing IL-18BP in a cell culture medium that is free of components derived from animal serum, wherein the cell culture medium comprises:

Asparagine at a concentration ranging from about 800 to about 900 mg/L;

Natrium Chloride at a concentration ranging from about 3000 to about 4500 mg/L;

Selenite at a concentration ranging from about 0.005 to about 0.015 mg/L;

Wheat hydrolysate at a concentration ranging from about 5000 to about 15000 mg/L; and

Insulin at a concentration ranging from about 2.5 to about 6 mg/L.

3. The process according to claim 1 or 2, further comprising the step of collecting the medium comprising the protein of interest.

4. The process according to any one of the preceding claims, further comprising isolating the protein of interest.

5. The process according to any one of the preceding claims, further comprising formulating the isolated protein with a pharmaceutically acceptable carrier to obtain a pharmaceutical composition.

6. The process according to any one of the preceding claims, wherein the cells are Chinese Hamster Ovary (CHO) cells.
- 5 7. The process according to anyone of the preceding claims; wherein the medium further comprises glucose at a concentration ranging from about 500 to about 5500 mg/L.
- 10 8. The process according to any one of the preceding claims, wherein the medium further comprises amino acids selected from Alanine, Arginine, Aspartic Acid, Cysteine, Glutamic Acid, Glycine, Histidine, Isoleucine, Leucine, Lysine, Methionine, Phenylalanine, Proline, Serine, Tryptophan, Tyrosine, Threonine, and Valine, but no Glutamine.
- 15 9. The process according to claim 8, wherein the medium further comprises Glutamine.
10. The process according to any one of the preceding claims, wherein the medium further comprises vitamins selected from Biotin, Pantothenate, Choline chloride, Folic Acid, Myo-Inositol, Niacinamide, Pyridoxine, Riboflavin, Vitamin B12, Thiamine, and Putrescine.
- 20 11. The process according to any one of the preceding claims, wherein the medium further comprises salts selected from CaCl₂, KCl, MgCl₂, Sodium Phosphate, CuCl₂, and ZnCl₂.
12. The process according to any one of the preceding claims, wherein the medium further comprises a buffer.
- 25 30 13. The process according to any one of the preceding claims, further comprising fatty acids selected from Arachidonic Acid, Linoleic Acid, Oleic Acid, Lauric Acid, Myristic Acid.

14. The process according to any one of the preceding claims, wherein the medium further comprises Cyclodextrin.

15. The process according to any one of the preceding claims, wherein the medium further comprises a soy hydrolysate.

16. The process according to any one of the preceding claims, wherein the medium further comprises hydrocortisone.

10 17. The process according to any one of the preceding claims, wherein the medium further comprises a protective agent, in particular Pluronic F68.

18. The process according to any one of the preceding claims, wherein the medium further comprises pyruvate.

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19. Use of a cell culture medium comprising

Asparagine at a concentration ranging from about 800 to about 900 mg/L;

Natrium Chloride at a concentration ranging from about 3000 to about 4500 mg/L;

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Selenite at a concentration ranging from about 0.005 to about 0.015 mg/L;

Wheat hydrolysate at a concentration ranging from about 5000 to about 15000 mg/L; and

Insulin at a concentration ranging from about 2.5 to about 6 mg/L

for the growth of cells expressing IL-18BP in culture.

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20. Use of a cell culture medium comprising

Asparagine at a concentration ranging from about 800 to about 900 mg/L;

Natrium Chloride at a concentration ranging from about 3000 to about 4500 mg/L;

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Selenite at a concentration ranging from about 0.005 to about 0.015 mg/L;

Wheat hydrolysate at a concentration ranging from about 5000 to about 15000 mg/L; and

Insulin at a concentration ranging from about 2.5 to about 6 mg/L

for the production of IL-18BP in cells expressing IL-18BP.

21. Use of a cell culture medium comprising

Asparagine at a concentration ranging from about 800 to about 900 mg/L;

Natrium Chloride at a concentration ranging from about 3000 to about 4500
5 mg/L;

Selenite at a concentration ranging from about 0.005 to about 0.015 mg/L;

Wheat hydrolysate at a concentration ranging from about 5000 to about 15000
mg/L; and

Insulin at a concentration ranging from about 2.5 to about 6 mg/L

10 for the maintenance of cells expressing IL-18BP in culture.